

## 6.3 VISUAL RESOURCES

### 6.3.1 Affected Environment

The DMR discussion is divided into two areas, DMR and Dillingham Trail, which would extend from SBMR to DMR. The ROI includes all areas within the line of sight of activities or changes proposed at DMR or Dillingham Trail. The ROI therefore includes a wide corridor of land along the proposed route of Dillingham Trail, including views from adjacent roadways (Wilikina Drive, Kaukonahua Highway, and Farrington Highway), coastal and nearshore areas, and trails or adjacent forest preserve areas.

DMR and the northern half of Dillingham Trail are within the planning area of the North Shore Sustainable Communities Plan of the General Plan for the City and County of Honolulu. The North Shore Sustainable Communities Plan states that views of scenic resources, such as the Wai'anae and Ko'olau Mountain Ranges, coastal pali, the coastline, and the Pacific Ocean, from public places, including major roadways, should be preserved. New developments should seek to minimize impacts on these scenic resources, and interagency and private sector participation and cooperation in the creation, maintenance, and enhancement of views and visual resources on the North Shore should be encouraged (City and County of Honolulu 2000a, 3-17).

The southern half of Dillingham Trail is within the planning area of the Central O'ahu Sustainable Communities Plan of the General Plan for the City and County of Honolulu. The Central O'ahu Sustainable Communities Plan states that visual landmarks and significant vistas should be preserved (City and County of Honolulu 2002a, 3-20), but the plan does not offer any specific guidance for preserving scenic resources in the area.

### ***Landscape Character***

#### *Dillingham Military Reservation*

The visual landscape of DMR is largely characterized by developed features, including the airfield and associated structures, fencing, antenna support structures, and roads. The developed area is within a gently sloping coastal plain between steeply sloping irregular ridges and valleys of the Wai'anae Mountain Range and the Pacific Ocean. Views to the south from DMR are less expansive because they are partially obscured by the ridgeline. Vegetation limits many views from within or onto DMR, except from the adjacent ridges. The Pacific Ocean is a dominant visual feature of the area near DMR, but it is largely screened from views on DMR by vegetation, fencing, or structures. The overall visual quality of DMR is low due largely to extensive modification that results in a lack of vividness, intactness, or unity.

Modifications in the surrounding area include residential uses immediately north of DMR and agricultural uses in the coastal plain areas east of DMR. These modifications give the landscape a highly ordered appearance, with strong regular lines. The area west of DMR is undeveloped and consists of grasses, low shrubs, and some mature trees that have variable densities and random ordering, resulting in a more unified and balanced visual space.

### Dillingham Trail

The proposed Dillingham Trail would depart the proposed Helemanō Trail (see Section 5.3) near the Poamoho stream, continuing northwest along the stream channel and east of Kaukonahua Road. This portion of the route is characterized by a broad, rolling valley floor with pineapple plantations that give the landscape a fine uniform texture. Roads through this area expose the dark red soil and create visually distinct lines that tend to draw the eye across the valley and up toward the sky or surrounding mountains. Although this area offers panoramic views of the Koʻolau and Waiʻanae Mountain Ranges and is unified in some cases by the consistency of the agricultural land use, the landscape where the trail would be constructed has been extensively modified, and, based on the criteria outlined in Section 4.3.1, the overall visual quality is considered to be moderate.

As the proposed Dillingham Trail approaches Thomson Corner and Waialua, urban development begins to dominate the visual field, but agricultural uses continue. Panoramic views of the Waiʻanae Mountain Range continue throughout this area, with the Pacific Ocean as an intermittent background feature. Based on the criteria outlined in Section 4.3.1, the overall visual quality is considered to be low along this portion of the route due to the high degree of human modification to the landscape.

Between Thomson Corner and Waialua, the trail would cross Farrington Highway toward the Waiʻanae Mountain Range and enter into a broad alluvial plain at the base of the mountains. This area is predominantly in agricultural use. Agricultural fields and features dominate the foreground and middle ground, while the irregular form of the Waiʻanae Mountain Range continues to be the dominant background feature. As the route continues west, the Pacific Ocean becomes an increasingly dominant middleground to foreground feature in views to the north. Although the high degree of modification in this area diminishes the visual quality of the area, the outstanding panoramic views of the Waiʻanae Mountain Range and Pacific Ocean result in an overall moderate visual quality along this portion of the route.

### ***Sensitive Views***

DMR and the northern end of Dillingham Trail are within the planning area of the North Shore Sustainable Communities Plan, which designates a number of intermittent and continuous sensitive views, including the following:

- Views of the Waiʻanae and Koʻolau Mountains, the Pacific Ocean and shoreline, and Waialua and Haleʻiwa towns, from Kamehameha Highway and Kaukonahua Road as one enters into the North Shore;
- Views of the Waiʻanae Mountains from Farrington Highway, Kaukonahua Road, and Kamehameha Highway;
- Stationary views from the shoreline, between Kaʻena Point and Makaleha Beach;
- Views of the Waiʻanae Mountain Range and agricultural fields from Crozier Drive; and
- Views from nearshore waters (City and County of Honolulu 2000a, 3-15).

Additional sensitive views in this area are associated with recreational areas along the north shore, especially Ka'ena Point State Park and Mokulē'ia Beach Park.

The Central O'ahu Sustainable Communities Plan designates a number of intermittent and continuous sensitive views in the viewshed of the Dillingham Trail, including the following:

- Northerly views from Kamananui Road between Kaukonahua Highway and Wilikina Drive; and
- Westerly views from Kaukonahua Highway from the intersection with Wilikina Drive to Thomson Corner (City and County of Honolulu 2000b, 3-21).

The North Shore Sustainable Communities Plan designates continuous scenic views along the Kamehameha Highway between Hale'iwa and Waiale'e and intermittent views on both sides of the Kamehameha Highway between the Poamoho Stream channel and Hale'iwa (City and County of Honolulu 2000a, 3-15).

As discussed in Section 6.2, DMR Land Use, public recreation/nonmilitary uses at DMR include flying glider planes, sky diving, and hang gliding. The Keālia Trail can be accessed through the western portion of DMR and is open to the general public on weekends and state holidays, except when military maneuvers are scheduled (USARHAW and 25th ID [L] 2001a). A publicly accessible Army wild pig hunting area is designated inland of the airfield on DMR.

### 6.3.2 Environmental Consequences

This section addresses the environmental consequences of the Proposed Action, Reduced Land Acquisition, and No Action alternatives on visual resources.

#### ***Summary of Impacts***

Construction of two FTI antenna support structures (Dillingham ARPT and Dillingham P1, Figure 2-7) approximately half a mile (0.8 kilometer) east of DMR would have a less than significant impact on views. Limited training would be conducted at DMR under the Proposed Action but would generally be screened from view by higher vegetative cover around the post and would not significantly affect visual resources. The proposed Dillingham Trail would not substantially alter the landscape due to previous disturbance and active agricultural use, but it would result in significant but mitigable impacts on views along the route. Potential impacts on visual resources are summarized in Table 6-8.

#### ***Proposed Action (Preferred Alternative)***

##### *Significant Impacts Mitigable to Less than Significant*

*Impact 1: Modification of the existing views—construction of Dillingham Trail.* Although the proposed Dillingham Trail would be within an area disturbed by agricultural practices and containing a number of agricultural roads, the trail would be visible from a number of major roadways and from portions of these roadways that are designated as scenic.

**Table 6-8**  
**Summary of Potential Visual Resources Impacts at DMR**

Impact Issues	Proposed Action	Reduced Land	
		Acquisition	No Action
Impairment of view during the construction phase	⊙	⊙	○
Modification of existing view	⊗	⊗	○
Alteration of the landscape character	⊙	⊙	○
Consistency with visual resource policies	⊙	⊙	○
Impairment of views from visible fugitive dust	⊙	⊙	○
Alteration of nighttime light and glare	⊙	⊙	○

In cases when there would be both beneficial and adverse impacts, both are shown on this table. Mitigation measures would only apply to adverse impacts.

**LEGEND:**

- |  |     |                     |
|--|-----|---------------------|
| ⊗ = Significant  | +   | = Beneficial impact |
| ⊗ = Significant but mitigable to less than significant | N/A | = Not applicable    |
| ⊙ = Less than significant                              |     |                     |
| ○ = No impact  |     |                     |

Segment one of the trail from the Helemanō Trail to Thomson Corner would be east of Kaukonahua Road, a designated continuous panoramic view, and west of Kamehameha Highway, an intermittent panoramic view; however, the trail would not be visible from either of these views due to intervening topography and vegetation (Photo 6-1). Dillingham Trail is not readily visible from Kaukonahua Road, but Stryker and other vehicles traveling along the trail can be seen from Kaukonahua Road along a few points for short distances. The Army vehicles may be seen as they cross under Kaukonahua Road. The impact on views along this segment of the trail would be minor.

Segment two of the trail in the vicinity of Thomson Corner would be within a highly modified area and not within any views designated as sensitive (Photo 6-2). The impact on views along this segment of the trail would be minor.

Segment three of Dillingham Trail from the highway crossing near Thomson Corner to DMR would be south of Farrington Highway and within a designated continuous panoramic view. Although the foreground and middle ground views from these locations have been altered by agricultural practices, this area is considered to be of medium sensitivity due to the expansive views and the scenic view designations. The proposed trail alignment would be within disturbed agricultural areas. Because of the low viewing angle of the trail from Farrington Highway, vegetation and topography would obstruct views of the trail alignment (Photo 6-3). The impact on views along this segment of the trail would therefore be low to moderate.



Photo 6-1. View from Kaukonahua Road looking east.



Photo 6-2. View from Farrington Highway looking north at proposed trail crossing location.



Photo 6-3. View from Farrington Highway looking south.

*Regulatory and Administrative Mitigation 1.* None proposed.

*Additional Mitigation 1.* The Army proposes to construct military vehicle trails to conserve existing natural features, including terrain and vegetative cover, to the extent practicable. Use of roadbed materials that contrast sharply with existing conditions will be avoided to the extent practicable. To avoid creating a discordant linear feature, the road alignment would, where possible, follow the natural contours of the land. Cut slopes would be minimized or avoided, where practicable, and would be blended into the landscape by rounding the edges of the slope and by differentially orienting the slope and the road bed alignments where practicable. Use of these techniques would be varied, based on the specific conditions, including depth of the cut, orientation of the slope, and type of material (e.g., dirt slope and rock slope).

#### *Less than Significant Impacts*

*Modification of the existing views—installing FTI.* Two FTI antenna support structures would be constructed at DMR and one approximately 1.5 mile (2 kilometers) south of DMR on the ridge. These towers would be in areas visible from designated scenic areas along Farrington Highway and the coastline, as well as from Keālia Trail (photos 6-4 and 6-5). These views would be partially screened by existing vegetation. This area has been altered by development and agriculture. The height of the towers on DMR would be 42 feet (13 meters), and the height of the tower on the ridge would be 30 feet (nine meters). Given the height of the towers and the level of modification to the natural environment around DMR, potential impacts from the towers on views would be less than significant.





Photo 6-4. View of DMR from Farrington Highway looking southeast.



Photo 6-5. View of DMR from Keālia Trail looking northeast.

Modification of the existing view—training activities. Under the Proposed Action, training exercises would continue at DMR. The Army would continue to operate and maintain its training assets there to meet its mission requirement. The level of use of these training assets is expected to remain approximately the same under the Proposed Action. Taking into consideration the limited changes occurring at DMR from the Proposed Action, the potential impact on views from changed training activities would be less than significant.

SBCT-related vehicles on the Dillingham Trail would be visible from potentially sensitive viewpoints, but these impacts would be intermittent and temporary and would be similar in character to large-scale agricultural activities (e.g., farm equipment and trucks) in the area. UAV use at DMR would also be an intermittent and temporary use that would be similar in character to existing uses at the airfield and would not significantly affect existing views.

Alteration of landscape character. Construction of Dillingham Trail would occur in an area that is heavily disturbed and contains a large number of features associated with agricultural use of the area (e.g., row crops patterns, roads, buildings). Construction of the trail in this area would not substantially alter the landscape character.

Impairment of view during the construction phase. Dillingham Trail would be constructed within the viewshed of several sensitive view corridors, but because these areas are intensively farmed, road construction would not be substantially inconsistent with current agricultural practices in the area.

Consistency with visual resource policies. SBCT training activities at DMR would not alter views from public roadways or sensitive view areas and would be substantially consistent with the visual preservation objectives stated in the Central O‘ahu and North Shore Sustainable Communities Plan. Measures described above would ensure consistency of the road construction with visual resource preservation policies.

Impairment of views from visible fugitive dust. As discussed in Section 6.5, training at DMR would increase fugitive dust. PM<sub>10</sub> emissions from military vehicle use on unpaved roadways and off-road areas would increase. (Section 6.9 includes a discussion of soil erosion.) Coastal winds would help dissipate the clouds so that the dust would not stay suspended in the air for an extended duration. It is assumed the fugitive dust and soil mitigation measures identified in Sections 6.5 and 6.9 would be implemented to keep soil erosion and compaction to a minimum. As a result, visual impacts would be less than significant with respect to visible fugitive dust.

Alteration of nighttime light and glare. Under the Proposed Action, the use of nighttime lighting devices, such as flares, during training might increase slightly. The use of these devices is not expected to increase dramatically because training in the use of night vision goggles would be conducted at night. Visual impacts would be less than significant with respect to altering nighttime light and glare.



***Reduced Land Acquisition Alternative***

The impacts associated with Reduced Land Acquisition would be identical to those described for the Proposed Action.

***No Action Alternative******No Impacts***

Under No Action, training exercises would continue at DMR. The Army would continue to operate and maintain its training area facilities in order to meet its training mission requirement. Invariably, the level of training would change occasionally in response to this requirement and consequently, the visual impact of these changes may alter as well. The level of use of the installation's training assets is not anticipated to alter the physical character of the landscape itself.